

**REMARKS**

In the advisory action, the Examiner declined to enter the preceding claim amendments. As such, he also did not address the amendments or the new arguments presented in Applicant's last Response to Office Action mailed on August 11, 2008 in response to a Final Office Action with a mail date of June 13, 2008. Applicants hereby resubmit the amended claims and arguments against the last rejection along with this request for continued examination.

Additionally, the Examiner has said that the proposed amendments would result in new searches because (i) the amendment to Claim 1 requires searching the named species; and (ii) the amendment to Claim 32 requires further consideration. Applicant believes the amendment to Claim 1 narrows that claim and falls within the scope of the previous search, thereby eliminating the need for a new search. The reasons for amending Claim 32 are detailed below.

1. Rejection of Claims 32-34 under 35 U.S.C. 112, first paragraph

The Examiner rejected claims 32-34 under 35 U.S.C. 112, first paragraph for the reasons of record. Specifically, the Examiner stated that the Applicant has not disclosed how one skilled in the art can use the method of detecting changes in lipid phosphatase activity and correlating these changes to disease detection and alleges that the claims as last submitted did not properly convey how a change or what sort of change would be required to link the disease to the change in levels.

Applicant has amended Claim 32 again in response to the rejection and believes this change addresses the Examiner's concerns. However, Applicant would like to point out that Applicant believes there is a fundamental flaw in the Examiner's allegation. Detecting a change is what these claims are written for, and it is irrelevant whether the change is an increase or decrease from normal, either direction would be a disease induced change.

In view of the foregoing amendment and remarks, Applicant respectfully requests withdrawal of the Examiner's rejections of claims under 35 U.S.C. 112, first paragraph.

2. Rejection of Claims 1-4, 7, 8, 10-15, 32-34, and 38 under 35 U.S.C 112, first paragraph

The Examiner has rejected claims 1-4, 7, 8, 10-13, 32-34 and 38 failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention for the reasons of record. This rejection is improper for two reasons, first in so much as this is a new rejection, the Examiner has only given a reason for Claim 4 being improperly worded and has not explained the rejection for the other claims. If this is not a new ground for rejection, then it should not be listed as a new ground for rejection and instead included in the Examiner's response to Applicant's prior arguments.

This rejection does not on its face appear to be new as Applicant has responded repeatedly to what is meant by "other lipid binding domains." The Examiner's attention is again respectfully directed to page 8, line 21, which reads that, "the signaling pathways involving these lipid modifying enzymes..." Applicant asserts that upon reading this disclosure, one of ordinary skill in the art would understand that "other lipid-binding domains" refers to those which are capable of interacting with lipids. Also, one of ordinary skill in the art would understand which particular functional groups need to be present in the domain for a reaction or interaction to occur with the lipid. Further, on page 10 lines 3-4 Applicant describes that "...proteins that are specific for PI(3,4)P<sub>2</sub> or PI(4,5)P<sub>2</sub> can be used in accordance with the invention." Applicant submits that this further supports "other lipid-binding domains" of certain embodiments of the instant invention as one of ordinary skill in the art would clearly understand which domains would be capable of binding or interacting with PI(3,4)P<sub>2</sub> or PI(4,5)P<sub>2</sub>. Since definiteness of a claim must be analyzed in light of the content of the application, Applicant submits that claim 4 clearly sets out the boundaries of certain embodiments of the instant invention and the subject matter for which protection is sought.

In view of the foregoing amendment and remarks, Applicant respectfully requests withdrawal of the Examiner's rejections of claims under 35 U.S.C. 112, first paragraph.

3. Rejection of Claims 1-4, 7, 10, 11, 14, 15, and 38 under 35 U.S.C. 102(a)

The Examiner has rejected Claims 1-4, 7, 10, 11, and 38 as anticipated by the Dowler reference. Applicant has amended Claim 1 in response to this rejection. Dowler does not mention PI(4,5)P2, PI(5)P, or PI and Dowler specifically does not disclose binding of PI(3,4,5)P3. Therefore, this claim amendment should remove the Dowler reference and render this rejection moot.

In view of the foregoing amendment and remarks, Applicant respectfully requests withdrawal of the Examiner's rejections of claims under 35 U.S.C. 102(a).

4. Rejection of Claim 8 under 35 U.S.C. 103(a)

The Examiner has rejected Claim 8 under 35 U.S.C. 103(a) as being allegedly unpatentable under Dowler in light of Goueli *et al.* Claim 8 depends from Claim 1, and Applicant has amended Claim 1.

Applicant would like to point out that Dowler does not mention PI(4,5)P2, PI(5)P, or PI and Dowler specifically does not disclose binding of PI(3,4,5)P3. Therefore, this claim amendment should remove the Dowler reference and render this rejection moot.

In view of the foregoing amendment and remarks, Applicant respectfully requests withdrawal of the Examiner's rejections of claims under 35 U.S.C. 103(a).

5. Rejection of Claims 12 and 13 under 35 U.S.C. 103(a)

The Examiner has rejected Claims 12 and 13 under 35 U.S.C. 103(a) as being allegedly unpatentable under Dowler in light of Taylor *et al.* Claims 12 and 13 depend from Claim 1, and Applicant has herein amended Claim 1.

Applicant initially points out that Dowler does not mention PI(4,5)P2, PI(5)P, or PI and Dowler specifically does not disclose binding of PI(3,4,5)P3. Therefore, this claim amendment should remove the Dowler reference and render this rejection moot.

In view of the foregoing amendment and remarks, Applicant respectfully requests withdrawal of the Examiner's rejections of claims under 35 U.S.C. 103(a).

6. Provisional rejection of claims 1-4, 7, 8, 10-12, on the ground of nonstatutory obviousness-type double patenting

The Examiner provisionally rejected claims 1-4, 7, 8, 10-12, 14 and 15 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/850,833.

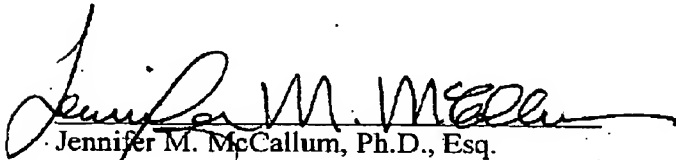
Applicant will address this issue by filing a terminal disclaimer upon successful resolution of the other outstanding substantive issues addressed herein.

7. Concluding Remarks

In view of the foregoing, Applicant respectfully submits that all rejections under record have been overcome. Accordingly, Applicant believes that Claims 1-4, 7-8, 10-15, 32-34 and 38 are now in a condition for allowance.

If the Examiner notes any further matters which would be expedited by a telephonic interview, she is requested to contact Dr. Jennifer M. McCallum at the telephone number listed below.

Respectfully submitted,



Jennifer M. McCallum, Ph.D., Esq.

Reg. No. 52,492

Customer No. 36234

The McCallum Law Firm, P.C.

P.O. Box 929 / 685 Briggs Street

Erie, CO 80516

Telephone: 303-828-0655

Fax: 303-828-2938

e-mail: [administration@mccallumlaw.net](mailto:administration@mccallumlaw.net)

11/26/08  
Date